



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX CSA 15.0034X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2017-10-26\)](#)
[Issue 0 \(2015-10-22\)](#)
Date of Issue: 2023-09-14
Applicant: **Tescom Corporation**
12616 Industrial Boulevard
Elk River, MN 55330
United States of America
Equipment: **Model ER5050 Electropneumatic Controller**
Optional accessory:
Type of Protection: **Flameproof "db" & Dust Protection by Enclosure "tb"**
Marking: Ex db IIB+H₂ TXX Gb
Ex tb IIIC T100°C Db IP6x
Temperature Code T5 : Ta = -20°C to +60°C
Temperature Code T6 : Ta = -20°C to +55°C

Approved for issue on behalf of the IECEx
Certification Body:

Dave Magee

Position:

Senior Director of Operations, Toronto

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada





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Manufacturer: **Tescom Corporation**
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Manufacturing locations: **Tescom Corporation**
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This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2011](#) Explosive atmospheres - Part 0: General requirements
Edition:6.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[CA/CSA/ExTR15.0042/00](#)

[CA/CSA/ExTR15.0042/01](#)

[CA/CSA/ExTR15.0042/02](#)

Quality Assessment Report:

[NL/DEK/QAR12.0027/07](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Electro-pneumatic Controller Model ER5050 is a cylindrical enclosure with a square base comprised of either Stainless Steel or Aluminum material. The cylindrical portion of the enclosure is a threaded cover that threads onto the base and houses the electronics. The base houses a total of eight sintered elements (six cup-shaped arrestors and two plug shaped arrestors) secured by means of snap rings, along with three 1/8"-27 plugs threaded into the base.

The base is the pneumatic portion of the flameproof enclosure. The product is optionally coated with a Chromate Conversion coating and optional primer, or with a non-metallic layer of a thickness not exceeding 0.2mm.

Conditions of Manufacture

The Manufacturer shall comply with the following:

1. Each process containment system shall be subjected to the Routine Overpressure Test as required by Clause G.4.1 of IEC 60079-1. Routine overpressure tests on process containment system to be conducted at 165 psi for 2 minutes. No permanent deformation shall occur, and the containment system shall subsequently be connected to a helium supply at 110psi, and experience a leakage rate of less than 10^{-2} Pa x l/s.
2. It is the responsibility of the manufacturer to continually monitor the status of the components associated with this equipment, and the manufacturer shall inform CSA of any modifications of the equipment that may impinge upon the flame proof design of the product.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The user/installer shall not remove any of the three, 1/8"-27 NPT plugs that are fitted into the base of the enclosure as this will invalidate the Hazardous Location Certification.
2. The equipment shall only be used with process gases which are classified for equipment group IIA and must not contain oxygen or any other oxidizer in concentrations greater than that found in normal air.
3. To comply with the Ex tb method of protection, avoid installations that could cause electrostatic build-up on coated surfaces and only clean coated surfaces with a damp cloth.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following changes:

1. Minor drawing modifications of administrative nature or involving changes to the design that do not affect the aspects of the product that are relevant to explosion safety.

Issue 2 – this Issue introduced the following changes:

1. The product was updated to include a new flamepath to act as a breather/drain.
2. Addition of alternate solenoid valves, specification of internal gaskets.
3. Addition of alternative temperature code and upper ambient.
4. Correction of routine test listed in report.
5. The changes outlined above required a drawing update.
6. Alignment of the Product Description and Conditions in the IECEx and ATEX Report.